The opinion in support of the decision being entered today is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte GARY STEPHENSON

Appeal 2007-4245 Application 09/489,310¹

Decided: 26 September 2007

Before ADRIENE LEPIANE HANLON, RICHARD TORCZON, and MICHAEL P. TIERNEY, Administrative Patent Judges.

HANLON, Administrative Patent Judge.

DECISION ON APPEAL

A. STATEMENT OF CASE

Appellant appeals under 35 U.S.C. § 134 from a final rejection of claims 23-31. We have jurisdiction under 35 U.S.C. § 6(b).

The Appellant's invention is directed to a method of treating dental erosion comprising orally administering to a mammal in need thereof a beverage composition having a pH of less than about 5 wherein the beverage composition comprises a polyphosphate compound.

¹ The real party in interest is The Procter & Gamble Company.

Claim 23, the only independent claim on appeal, reads as follows:

A method of treating dental erosion comprising orally administering to a mammal in need thereof an effective amount of a beverage composition having a pH of less than about 5; wherein the beverage composition comprises a compound having the structure:

$$M \xrightarrow{O \xrightarrow{|I|} O \xrightarrow{N'} O \xrightarrow{M''} n}$$

wherein n is an integer averaging from about 7 to about 100 and M, M', and M'' are each, independently, selected from the group consisting of sodium and potassium, and wherein the beverage composition is substantially free of calcium and fluoride.

B. ISSUE

Claims 23-31 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kohl.² The sole issue on appeal is whether the phrase "in need thereof" in claim 23 defines over the prior art.

C. FINDINGS OF FACT

The following findings of fact are believed to be supported by a preponderance of the evidence. Additional findings of fact as necessary appear in the Analysis portion of the opinion.

1. <u>Background of the invention</u>

Soft drink beverages, e.g., cola beverages, and fruit juice beverages have the potential to cause dental erosion in the consumer of the beverage. Appellant's Specification 1:14-16.

² U.S. Patent 3,681,091 issued to Kohl et al. on August 1, 1972.

Appeal No. 2007-4245 Application 09/489,310

Dental erosion is caused when the beverage composition is acidic in nature, i.e., exhibits a pH of about 5 or below. Appellant's Specification 19:35-20:1.

Since many consumers ingest acidic beverage compositions weekly, daily, or even more frequently, a beverage composition that protects against dental erosion would be advantageous. Appellant's Specification at 1:19-21.

2. Appellant's invention

"Dental erosion" is defined as loss, softening, and/or demineralization of mammalian tooth substance. Preferably, such loss of tooth substance occurs by direct action of acid on the tooth surface. Such acid may be present in the oral cavity through administration of acidic foods and beverages, i.e., having a pH of less than about 5. Appellant's Specification 4:10-17.

The term "treating" is defined as inhibiting (either partially or completely), reversing, and/or protecting against dental erosion with respect to the user of the present beverage composition. Appellant's Specification 4:22-24.

The term "orally administering" means that a mammal ingests or is directed to ingest one or more beverage compositions of the present invention. Appellant's Specification 5:9-12.

The beverage compositions may comprise one or more flavor agents selected from, for example, fruit juice. Appellant's Specification 11:18-19.

Most preferred juices include juices derived from apples. Appellant's Specification 11:35-12:2.

3. Kohl

Kohl discloses that certain polyphosphates retard and eliminate spoilage in a wide variety of perishable food materials. Kohl 1:29-38.

The disclosed polyphosphates may be added to fruit juices such as apple juice. Kohl 2:50-57.

There is no dispute that the fruit juices disclosed in Kohl, containing the polyphosphates of the invention, are beverage compositions within the scope of claim 23.

D. PRINCIPLES OF LAW

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 USPO2d 1746, 1749 (Fed. Cir. 1991).

Where the claimed and prior art products are identical or substantially identical, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of the claimed product. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977).

One of ordinary skill in the art is presumed to have skills apart from what the prior art references expressly disclose. *See In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985). A person of ordinary skill is a person of ordinary creativity, not an automaton. *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1742, 82 USPQ2d 1385, 1397.

E. ANALYSIS

Claim 23 originally read (Amendment dated July 3, 2002 at 1):

A method of treating dental erosion comprising orally administering to a mammal a beverage composition having a pH of less than about 5; wherein the beverage composition comprises a compound having the structure:

$$M \xrightarrow{Q} Q \xrightarrow{Q} Q - M'$$

$$Q \xrightarrow{Q} Q - M'$$

wherein n is an integer averaging from about 7 to about 100 and M, M', and M' are each, independently, selected from the group consisting of sodium and potassium, and wherein the beverage composition is substantially free of calcium and fluoride.

The Examiner found that the recited "method for treating dental erosion" requires only that the beverage be "orally administered" to a mammal which would have occurred in the prior art when the beverage was consumed by the mammal. Citing *Jansen v. Rexall Sundown, Inc.*, 342 F.3d 1329, 68 USPQ2d 1154 (Fed. Cir. 2003), the Examiner stated that where a treatment preamble is recited, the phrase "in need thereof" must appear in the body of the claim to require administration to a particular individual requiring such treatment. Office Action dated March 17, 2004 at 4.

The Examiner indicated that the rejection would be overcome if claim 23 were amended to read, "A method for treating dental erosion, comprising orally administering to a mammal *in need thereof* an effective amount of a beverage" (emphasis added). Office Action dated November 1, 2004 at 3; see also Office Action dated March 17, 2004 at 4.

Appeal No. 2007-4245 Application 09/489,310

2):

The Appellant amended claim 23 accordingly. Amendment filed April 8, 2005 at 2. In that same amendment, the Appellant argued (*Id.* at 4):

As stated throughout the present specification, drinking low pH beverages contributes to dental erosion. Thus, anyone drinking a low pH beverage composition is in need of the compositions of the present invention.

In response, the Examiner stated (Office Action dated June 6, 2005 at

Although Applicant has adopted the "in need thereof" language suggested by the examiner, the comments made in the response make clear that the examiner's reasoning has not been accepted

Whether true or not, [the Applicant's] statements nullify the use of "in need thereof" as distinguishing language since, as set forth at the passage bridging pp. 1333 and 1334 of the *Jansen* decision, the term "in need thereof" must be considered in light of the prosecution history. By making the above statement, Applicant casts doubt – on the record – on the adequacy of "in need thereof" as distinguishing language.

Accordingly, the examiner now suggests amending claim 23 as follows:

A method of treating dental erosion comprising orally administering to a mammal who has been directed to ingest, for the purpose of treating said dental erosion, a beverage composition having a pH of less than about 5... [underlining in original.]

On appeal, the Appellant argues (Appeal Brief at 4³):

The additional amendments proposed by the Examiner are not supported by any proper interpretation of the *Jansen* case. The case does not require that additional language [be added] to the claims, beyond that which has been added to the present claim, namely "in need thereof".

³ "Appellant's Supplemental Appeal Brief" filed August 31, 2006.

The Jansen case does not require, as the Examiner suggests that the person using the presently claimed beverage be instructed to do so by, for example, a doctor. The Jansen decision merely requires that the "need be appreciated". In the present case, it is notoriously well known that acidic beverages, which include most colas, fruit flavored and fruit based beverages, slowly erode tooth enamel. As such, the average consumer of a cola product appreciates the need for enamel erosion control.

The Appellant recognizes that the average consumer of an acidic beverage, e.g., a cola product, appreciates the need for enamel erosion control. Therefore, it is reasonable to find that the average consumer of the acidic beverages of the prior art would also appreciate the need for enamel erosion control and thus be "in need of" enamel erosion control as that phrase is interpreted in *Jansen*.

Furthermore, setting *Jansen* aside and focusing on the inherency case before us, we find that acidic beverages, such as colas and fruit juices, are known to promote dental erosion. Therefore, we find that all individuals with natural teeth who drink acidic beverages, such as the acidic beverages of the prior art, are necessarily "in need of" protection from dental erosion. We further find that drinking juice containing the polyphosphates disclosed in Kohl would inherently treat dental erosion.

For the reasons set forth above, it is reasonable to find that the phrase "in need thereof" does not define the invention of claim 23 over the prior art.

Claims 24-31 stand with claim 23.

F. DECISION

The rejection of claims 23-31 under 35 U.S.C. § 102(b) as being anticipated by Kohl is <u>affirmed</u>.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED

THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION-WEST BLDG. WINTON HILL BUSINESS CENTER-BOX 412 6250 CENTER HILL AVENUE CINCINNATI, OH 45224